

Nina McLawhorn Research Administrator Wisconsin Department of Transportation 608-266-3199 nina.mclawhorn@dot.state.wi.us

#### Disadvantaged Business Enterprise Programs Research and Best Practices

Prepared for

#### **Bureau of Equity and Environmental Services Wisconsin Department of Transportation**

Prepared by

## WisDOT RD&T and Library CTC & Associates LLC

#### **January 6, 2005**

Transportation Synthesis Reports (TSRs) are brief summaries of currently available information on topics of interest to WisDOT technical staff in highway development, construction and operations. Online and print sources include NCHRP and other TRB programs, AASHTO, the research and practices of other state DOTs, and related academic and industry research. Internet hyperlinks in TSRs are active at the time of publication, but changes on the host server can make them obsolete.

#### REQUEST FOR REPORT

The WisDOT RD&T Program and Library were asked to prepare background information on existing research and effective practices related to Disadvantaged Business Enterprise Programs. The purpose of this report is to assist DBE program managers and others in identifying research that is still needed and potential resources for conducting the research.

#### **SUMMARY**

A relatively modest amount of research appears to be available on DBE programs and issues. We summarize in the categories below the reports, papers and other resources we found. W provide Web links to some of these documents and also include some as appendixes or attachments with the hard copy version.

- NCHRP and US DOT reports
  - o An NCHRP Synthesis Report to be published by TRB in February 2005. This will be an excellent compilation of resources as well as an analysis of state DBE programs.
  - A December 2003 report from the US DOT Office of Inspector General recommending several initiatives to curb fraud and abuse.
  - A June 2001 report from the US General Accounting Office summarizing nationwide DBE data and recommending additional future data gathering.
- Online resources, including a new WisDOT Web page with links to the DBE programs of each state.
- News reports and other descriptions of several state DBE programs: GA, IL, MI, OH, PA, TN, TX.
- Capacity building of small, medium or micro enterprises in South Africa.
- Five journal articles on DBE-related issues.

#### NCHRP AND US DOT REPORTS

Effective Construction Management of Disadvantaged Business Enterprise Issues
Draft NCHRP Synthesis of Highway Practice 341, Project 20-5, Topic 34-05
Gary R. Smith, North Dakota State University, <a href="mailto:gary.smith@ndsu.nodak.edu">gary.smith@ndsu.nodak.edu</a>, 701-231-7880

See project scope at <a href="http://www4.nas.edu/trb/synthsis.nsf/All+Projects/Synthesis+341">http://www4.nas.edu/trb/synthsis.nsf/All+Projects/Synthesis+341</a>.

A recent update on the project status can be found at <a href="http://www4.nationalacademies.org/trb/crp.nsf/All+Projects/NCHRP+20-05">http://www4.nationalacademies.org/trb/crp.nsf/All+Projects/NCHRP+20-05</a>. Search on the page for Topic 34-05.

This NCHRP synthesis report, to be published by TRB in the next several weeks, will be a solid resource of information on several aspects of DBE programs. The research project was undertaken to document how state DOTs have responded to new Disadvantaged Business Enterprise rules implemented in February 1999 and revised in June 2003. The new rules prescribe some new requirements but also allow flexibility to states in determining compliance with such things as bidders lists, prompt payment, retainage, documentation of commitments and actual achievements, good faith efforts, and overall compliance.

The final scope for Synthesis 341 included a literature review and survey of the state DOTs on their contract administration procedures, particularly post-award contract issues but also including pre-award issues such as goal-setting, bidder's list and prompt payment provisions.

Since this document has not been formally released by TRB we are providing only a brief overview of the contents. Once the final document is available we will present a detailed summary, especially regarding the need for further research.

#### **Highlights of Synthesis 341 survey findings from 36 state DOTs:**

- Online listing: All DOTs reported that their states' information on DBEs was available through DOT Web sites
- Across-the-board goals: Goals are split between race neutral and race conscious methods rather than across-the-board. A few DOTs have been successful at establishing and accomplishing their goals in a race neutral program.
- **Incentives**: Some respondents reported some form of incentive for improving DBE utilization, such as giving additional credit for specific use of DBEs.
- **Barriers**: Barriers to DBE utilization include: lack of resources (financial, bonding, insurances etc.), stigma of "DBE" designation or perception of special treatment, larger contract sizes, primes unwilling to work with new DBE firms, DBE perception that certification is a work guarantee.
- **Future needs**: Suggestions included: change back to two goal program- women and minorities; increase support services funding; local DBE/small business bonding and insurance consortia; and education of non-DBE contractors.
- Mentor protégé programs: Mentor protégé programs have been developed in one-third of the surveyed DOTs to aid in small business development.

#### **Issues for Further Research from Synthesis 341**

- 1) Forecasting: Half of the DOTs did not achieve projected goals, indicating a need to improve forecasting techniques.
- **2) Models/algorithms**: Good faith effort analysis would benefit from models/algorithms based on objective data. Research in this area could reduce reliance on rules of thumb or subjective evaluation.
- 3) Company growth models: DBE business development would benefit from research on company growth models applicable to the transportation construction industry.
- 4) **Performance measures**: Development of appropriate program performance measures would be of benefit to all DOTs. Goal achievement may or may not be a valid measure of performance.
- 5) Innovative contracting methods: Research would be helpful that examines the impact on DBE firms of innovative contracting methods such as design-build and bundled contracts
- **6) Overconcentration**: A study to identify current methods of determining overconcentration would benefit DBE program administrators in evaluating their program performance.

#### Top Management Challenges, USDOT Report No. PT-2004-06, Dec. 5, 2003

<u>http://www.oig.dot.gov/show\_pdf.php?id=1217</u>. (Attached with hard copy version.)

The US DOT Office of Inspector General identified issues related to DBE Program as one of the 10 top management challenges for FY 2004. According to the report, the DBE Program suffers from a high level of fraud and abuse as well as significant gaps in the department's oversight. In two investigations and in briefings before the DOT's DBE fraud task force, the OIG made the following recommendations (#9, page 26):

- The DBE regulations covering airport concessions need to prescribe a personal net worth limit for the owner of a DBE. A limitation on personal net worth would serve as an appropriate determinant in establishing whether an individual is economically disadvantaged.
- The regulations should set forth clear, objective and tangible criteria for rebutting the presumption of economic disadvantage.
- Consideration should be given to establishing terms for DBE firms, and their owners, to ultimately graduate from DBE eligibility.

- The department needs to strengthen the effectiveness of its stewardship of the DBE Program, beyond current protocols, which now largely consist of limited documentary reviews. Oversight should include site visits, DBE and prime contractor interviews, detailed certification file reviews, work-site surveillance, and the resources to support the compliance activities.
- The department should perform its own up-front examination of DBE certification application packages.

## Disadvantaged Business Enterprises: Critical Information Is Needed to Understand Program Impact United States General Accounting Office Report to Congressional Committees, June 2001 <a href="http://www.gao.gov/new.items/d01586.pdf">http://www.gao.gov/new.items/d01586.pdf</a>. (Attached with hard copy version.)

This report provides information on (1) important changes made to the DBE program since 1999, (2) characteristics of DBEs and non-DBEs that receive USDOT-assisted highway and transit contracts, (3) evidence of discrimination and other factors that may limit DBEs' ability to compete for USDOT-assisted contracts, and (4) the impact of the DBE program on costs, competition and job creation and the impact of discontinuing the federal and nonfederal DBE programs.

To address these issues, a nationwide mail survey was conducted in October 2000 of the 52 state DOTs (including those of the District of Columbia and Puerto Rico) and the 36 largest transit authorities. Responses were received from all 52 state DOTs and 31 transit authorities, for an overall response rate of 94 percent. The survey instrument and overall results are included in appendix II and selected survey results are available at <a href="https://www.gao.gov/special.pubs/dbe">www.gao.gov/special.pubs/dbe</a>. The investigators also assessed USDOT's DBE program data, reviewed court cases addressing the constitutionality of USDOT's DBE program since 1995, and analyzed disparity studies.

#### **ONLINE RESOURCES**

#### **Direct Access to All DBE Programs**

http://www.dot.wisconsin.gov/library/research/resources/states/dbe.htm.

A new online resource of the WisDOT Library provides direct access to the DBE programs of each of the states.

#### OSDBU/MRC Web site

http://osdbuweb.dot.gov/.

The Office of Small and Disadvantaged Business Utilization and Minority Resource Center (OSDBU/MRC) Web site provides a listing of services and programs available to small businesses (including veteran-owned, service-disabled veteran-owned, HUBZone, disadvantaged and women-owned) on transportation-related contracting opportunities. The site also contains information on OSDBU/MRC's system of Regional Centers and its Short Term Lending and Bonding Assistance programs, as well as postings of news and events and success stories. Visitors may also subscribe to the OSDBU/MRC online newsletter – Transportation Link – at <a href="http://osdbu.dot.gov/mrc">http://osdbu.dot.gov/mrc</a> services/newsletter.cfm.

#### **STATE DOT INITIATIVES**

#### Georgia

Mayor celebrates success of Atlanta's Diversity Program at Hartsfield-Jackson Atlanta International Airport City of Atlanta Online: <a href="http://www.atlantaga.gov/media/nr">http://www.atlantaga.gov/media/nr</a> highiversity 021704.aspx.

To alleviate past discrimination and to address the lack of opportunities for minority and female-owned businesses, the City of Atlanta created an Airport Diversity Program for the airport's \$6.2 billion construction expansion to promote equal opportunity for all businesses in the Atlanta region. The program has two components: federally funded construction projects are covered under the DBE program, and city funded projects are covered under the city's Equal Business Opportunity program.

Joe Jackson, Supplier Diversity Manager for the Hartsfield-Jackson Development Program, was kind enough to field questions from us relevant to this report.

**Q**: We are particularly interested in the successful manner in which you were able to increase the participation of DBE firms in contracts related to the airport expansion project.

A: "A key strategy was to forecast for diversity participation levels early on in the planning and design phases, leading up to the procurement stages. We also developed dashboard, scorecards and intervention levels when projects were not meeting diversity spending actuals verses commitments or goals. We entered into partnering sessions with prime and subcontractors with the objective to promote contract partnering opportunities."

**Q**: How was the entire megaproject beneficial for small business development, job creation and/or economic development in general in your region.

A: "We have trained over a thousand or more firms in areas pertaining to upcoming contracting opportunities, business development and technical assistance programs. We have partnered with all demographics consisting of advocacy groups, civic, religious and various organizations. The mentoring of high school and college students has developed, as has the Multiplier Effect on the economy and the residents of Atlanta."

Adds Joe, "I am available to further discuss with you and your agency some additional best practices and how the alliance may be able to assist your agency." Joe may be contacted at <u>Joe.Jackson@atlanta-airport.com</u>.

#### Illinois

I-74 minority contracts exceeding mandates, Peoria Journal Star, Dec. 17, 2004.

(Attached with hard copy version.)

A collaborative effort between the Illinois DOT, area ministers and other organizations such as the Peoria Black Chamber of Commerce to help minority contractors grow fledgling businesses gave J&J Construction an edge in winning successively larger contracts.

Tollway faulted on contracts, Chicago Tribune, Dec. 15, 2004.

(Attached with hard copy version.)

Disadvantaged female- and minority-owned businesses received less than 1 percent of Illinois State Toll Highway Authority construction work last year, a staggering statistic that the agency is trying to change as it moves forward with a 10-year \$5.3 billion building program. As part of its effort, the tollway has formed advisory councils whose members include groups like Black Contractors United and the Illinois Hispanic Chamber of Commerce. Among other things, the councils are looking at breaking down contracts into smaller pieces so more firms could bid on them. Beth Doria, executive director of the Federation of Women Contractors, said that dividing up projects will ultimately benefit the tollway. "From a business perspective that's a good thing for the tollway because it makes it a little bit more competitive. They are able to get a lot more bids submitted and more to choose from."

#### Michigan

Legislative Report FY 2003: Section 318- Effort to increase use of women and minority owned businesses in state and local road construction projects.

http://www.michigan.gov/documents/MDOTsec318\_61253\_7.pdf.

(See Appendix A).

The Michigan DOT Office of Equal Opportunity is committed to increasing participation of minority and women owned businesses in state and local road construction projects. Toward this goal, OEO outreach activities for fiscal year 2002 included 11 business opportunity forums statewide sponsored by MDOT. As a result of this outreach participation, 115 DBE certification applications were requested and mailed. OEO also participated in other outreach activities sponsored by the African American Trucking Association, Michigan Minority Business Development Council, National Association of Women in Construction, and other organizations. As a result of these activities 170 DBE packages were requested and mailed.

#### Ohio

Division of Finance and Forecasting: Minority Business Enterprise Information <a href="http://www.dot.state.oh.us/finance/MBE.htm">http://www.dot.state.oh.us/finance/MBE.htm</a>.

In August 2004, ODOT and the Ohio Department of Administrative Services co-sponsored a business fair that provided minority businesses with an opportunity to meet with ODOT purchasers and discuss possible contracts. The event was conducted on the Ohio State Fairgrounds, and featured a "reverse" format, in that ODOT displayed commodities and services that it purchases on a regular basis, giving vendors the opportunity to see what kind of business they would be able to do with ODOT.

#### Pennsylvania

*Race-Neutral Program Development and Evaluation*, FHWA-PA-2002-005-97-04 (84), February 5, 2002 (Attached with hard copy version.)

This research project conducted for the Pennsylvania DOT included a strategic assessment and review of PENNDOT race-neutral practices, a scoping of intervention alternatives and development of evaluation procedures. Implementation plans were developed for the eleven top priority interventions: assisting DBEs with certification processes, standardizing procedures and forms, making forms available on the Web, making the DBE directory searchable, creating opportunities for primes and subs to meet each other, computer/Internet training, systematic and formalized use of needs assessment, assistance with bid preparation, improved tracking of race-neutral activities, market research, and inclusion of subcontractors in pre-construction conferences.

#### Tennessee

**TDOT** slow finding ways for minorities to win lucrative contracts, some say, From the Tennessean, Feb. 6, 2004 http://www.tennessean.com/government/archives/04/02/46571818.shtml.

TDOT is proposing legislation that would allow it to set up a program to guarantee bonding for small and disadvantaged businesses. A bond of as much as 5 percent of the amount of the contract is a requirement of some TDOT jobs, and it is often too expensive for struggling companies to meet.

#### Texas

Special Report to the Legislature-Additional e-Texas Recommendations, April 2003 GG-39: Reduce Insurance Costs Through a Rolling Owner-Controlled Insurance Program <a href="http://www.window.DOTte.tx.us/specialrpt/etxaddnl/gg39.html">http://www.window.DOTte.tx.us/specialrpt/etxaddnl/gg39.html</a>.

Under an owner-controlled insurance program (OCIP), the owner of a construction project designates an insurance broker to secure insurance policies for the entire project, covering each general contractor and subcontractor. An OCIP can create improved opportunities for smaller and historically underutilized businesses (HUBs) to bid on construction projects. Typically, small contractors find it difficult to obtain the insurance necessary to participate in large construction projects; OCIPs allow such contractors to obtain insurance much more easily.

If an OCIP is established for a series of construction projects, it is often called a rolling owner-controlled insurance program (ROCIP). In 1996, the Austin Independent School District included a ROCIP as part of its 1996 bond construction program. Statistics in early June 1999 showed that 43 percent of contracts related to the program went to small businesses, while 32 percent went to HUBs.

#### INTERNATIONAL

**South Africa** 

Capacity Building of Construction SMMEs (small, medium or micro enterprises) – Experiences on a South African Toll Road, Glenn Havemann, 2001.

(See Appendix B.)

Construction SMMEs (small, medium or micro enterprises) are a Development Bank of Southern Africa (DBSA) term that refers to local emerging entrepreneurs or small contractors, women in construction, disabled persons, and youth from disadvantaged black communities in South Africa. This paper looks at road construction SMME capacity building in the context of a toll road project between South Africa and Mozambique. The paper explores the use of social contracting as a vehicle to integrate entrepreneurial development into mainstream construction activities and relates the experiences gained in the case study of the South African portion of the toll road.

#### **JOURNAL ARTICLES**

The five journal articles abstracted below are available through IgnentaConnect, an online collection of academic and professional publications (<a href="http://www.ingentaconnect.com/">http://www.ingentaconnect.com/</a>). The issues addressed in the articles could serve as potential DBE-related research areas. Abstracts provided by IngentaConnect are shown below; full-text articles may be obtained from Ingenta or through the WisDOT Library.

- The importance of public relations
- Survival strategies in a competitive environment
- Historically Black Colleges and Universities as catalysts
- Networking to raise capital, recruit labor, find customers, get business support
- Urban-rural gender gap

1) "Does use of public relations promote a higher growth rate in small firms?: The case of Lincolnshire" Corporate Communications: An International Journal, 1 April 2004, vol. 9, no. 4, pp. 294-301(8) <a href="http://www.ingentaconnect.com/search/article:jsessionid=n87xikj1g26p.victoria?title=minority+businesses&title\_type=tka&year\_from=1997&year\_to=2004&database=1&pageSize=20&index=2.">http://www.ingentaconnect.com/search/article:jsessionid=n87xikj1g26p.victoria?title=minority+businesses&title\_type=tka&year\_from=1997&year\_to=2004&database=1&pageSize=20&index=2.</a>

**Abstract.** A survey was undertaken to identify the ways in which small businesses in Lincolnshire used public relations. For many of the 51 activities, techniques and skills examined, it is found that only a minority of small firms practise them. Analysis of the results of the survey highlight an interesting connection between those businesses with a high rate of growth and use of certain public relations activities and techniques. Specifically, based on Mann-Whitney tests and using a restrictive level of significance (0.1 per cent), it is found that managing government relations (local or central), mounting exhibitions (consumer), providing media news releases, and writing letters to the media are associated with growth. As these four are not commonly used it is suggested that these, among other uses of PR, should be included in skills programmes for small business development.

### 2) "Small Asian-owned retail businesses in the UK: an exploratory investigation" Marketing Intelligence & Planning, 24 September 2003, vol. 21, no. 6, pp. 346-356(11)

http://www.ingentaconnect.com/search/article;jsessionid=n87xikj1g26p.victoria?title=minority+businesses&title\_type=tka&year\_from=1997&year\_to=2004&database=1&pageSize=20&index=9.

Abstract. This paper investigates the importance of cultural factors within ethnic minority-owned firms' business practices. In doing so, it provides a contribution to the growing body of knowledge at the marketing/entrepreneurship interface and reports specifically on an empirical investigation into the retail marketing practices within a sample of Asian-owned small firms operating in the UK. The findings from 20 in-depth personal interviews provide an insight into the practices of ethnic minority-owned retail businesses indicating that factors associated with key decision makers together with cultural networks, balanced against resource constraints, had a major impact on firms' operations. Strategies used by the firms in order to enable them to survive in a competitive environment are identified and these contribute to knowledge by questioning the relevance of "break-out theory" to ethnic minority-owned firms.

### 3) "Historically Black Colleges and Universities (HBCUs) as Agents for Change for the Development of Minority Businesses"

Journal of Black Studies, November 2001, vol. 32, no. 2, pp. 166-183(18)

http://www.ingentaconnect.com/search/article;jsessionid=n87xikj1g26p.victoria?title=minority+businesses&title\_type=tka&vear\_from=1997&vear\_to=2004&database=1&pageSize=20&index=27.

**Abstract.** This paper attempts to make a wake-up call to Historically Black Colleges and Universities (HBCUs) to respond to the plight of minority business owners while also fulfilling their role of educating students. Although the state of minority businesses was much better than what the public is made to believe, however, these businesses continue to face challenges. Aside from the traditional problem of limited capital resources many challenges have ensued from the economic, social and political changes in our society today. As long as the current political and economic climates persist, leading to a negative impact on the economies of minority population, institutions of higher learning, particularly HBCUs, have a unique opportunity to be the catalyst of change in the development and promotion of minority businesses.

# 4) "Networking and ethnic minority enterprise development: insights from a North London study" Journal of Small Business and Enterprise Development, 1 March 2000, vol. 7, no. 3, pp. 228-240(13) <a href="http://www.ingentaconnect.com/search/article:jsessionid=n87xikj1g26p.victoria?title=minority+businesses&title\_type=tka&year\_from=1997&year\_to=2004&database=1&pageSize=20&index=36.">http://www.ingentaconnect.com/search/article:jsessionid=n87xikj1g26p.victoria?title=minority+businesses&title\_type=tka&year\_from=1997&year\_to=2004&database=1&pageSize=20&index=36.</a>

Abstract. This paper is concerned with the role of networking in the development of ethnic minority enterprises, using empirical data drawn from a wider study of 82 ethnic minority businesses in North London. The paper uses a broadly based definition of networks that focuses on the exploitation of both formal and informal relationships for business development purposes, which includes social networks as well as voluntary and necessary business-based linkages. More specifically, the paper considers the role of networking in raising capital, recruiting labour, identifying and finding customers, as well as accessing business support. The results show that personal and community-based networks are used both to mobilise resources and to generate sales by business owners in all groups, although the nature and extent of the activity varies at different stages of business development. As other studies have shown, there is a very low level of take-up of business advice and support from mainstream support agencies by these ethnic minority enterprises, not because of a lack of awareness but because of a range of negative attitudes towards them.

### 5) "Understanding the Gender Gap in Small Business Success: Urban and Rural Comparisons" Gender & Society, February 2004, vol. 18, no. 1, pp. 5-28(24)

 $\frac{\text{http://www.ingentaconnect.com/search/article:jsessionid=n87xikj1g26p.victoria?title=successful+women-owned+businesses\&title\_type=tka\&year\_from=1997\&year\_to=2004\&database=1\&pageSize=20\&index=1.}$ 

Abstract. The authors explore how urban versus rural community location shapes the extent to which various individual, relational, and structural factors affect the gender gap in small business success. Building on previous research on gender and small business success, gender queuing theories, and gendered organization/institution theories, they develop a place-specific theory of the gender gap in small business success. The findings, based on small business data collected in urban and rural Iowa (1995 and 1997), support queuing arguments and raise questions about the effectiveness of crowded-sector explanations. They indicate that the gender gap in small business success operates such that men-owned businesses are more successful in both urban and rural settings but that men-owned businesses are even more successful than women-owned businesses in urban than rural communities. The authors discuss the causes and consequences of the gender gap in small business success in rural and urban places and identify key issues for further research.



JENNIFER M. GRANHOLM

## STATE OF MICHIGAN DEPARTMENT OF TRANSPORTATION LANSING

GLORIA J. JEFF DIRECTOR

March 26, 2003

The Honorable Shirley Johnson, Chair Appropriation Subcommittee on Transportation Michigan State Senate P.O. Box 30036 Lansing, Michigan 48909-7536

The Honorable Scott Shackleton, Chair Appropriations Subcommittee on Transportation Michigan House of Representatives P.O. Box 30014 Lansing, Michigan 48909-7514

Dear Senator Johnson and Representative Shackleton:

Enrolled House Bill No. 5651, Section 318 requirement states

The department shall continue its program to increase the use of women and minority-owned businesses in state and local road construction projects. This program shall comprise, at a minimum, outreach and education efforts to inform women-and minority-owned firms of department competitive bidding processes and requirements, and an assessment of the availability of surety for women- and minority-owned businesses.

The Michigan Department of Transportation (MDOT) Office of Equal Opportunity (OEO) is committed to increasing participation of minority and women owned businesses in state and local road construction projects.

Toward this goal, Office of Equal Opportunity outreach activities for fiscal year 2002 included 11 Business Opportunity Forums (BOF) statewide sponsored by MDOT:

Michigan Department of Management and Budget Acquisition Services and Infrastructure Services
Michigan Economic Development Corporation
Michigan Department of Career Development
Michigan Department of Corrections
Michigan State Industries
Other state and local partners.

As a result of this outreach participation, 115 Disadvantaged Business Enterprise (DBE) certification applications were requested and mailed.

Senator Shirley Johnson Representative Scott Shackleton Page 2 March 26, 2003

OEO also participated in other outreach activities sponsored by: African American Trucking Association, Michigan Minority Business Development Council, 5<sup>th</sup> Annual Minority Business Development Conference with Lewis College of Business, Michigan Road Builders Association, Construction Association of Michigan's Design & Construction Expo, National Association of Women in Construction, Women's Business Council's Breakthrough Breakfast, Michigan Minority Business Development Council's Procurement Conference & Trade Fair, and MDOT's Annual DBE Conferences. As a result of these activities, 170 DBE packages were requested and mailed. OEO also received over 24 calls requesting certification applications as a result of outreach awareness.

In calendar year 2002, 310 requests for DBE applications were a result of OEO's outreach participation. OEO renewed 69 DBE applications, approved 82 new firms in the DBE Program, and referred 20 firms to our in-state partners during FY 2002.

The DBE Program held its Annual Business Development Conference at two locations for attendance by certified contractors, minority and women owned businesses. The conferences entitled "Partners in Success" were held in Detroit and Mt. Pleasant. Each day of the conference had a separate theme. The first day, "Networking for Visibility", provided a series of forums to enhance networking and expand contracting opportunities for attendees. Session topics included: Networking in an E-Age, Face-to-Face, One-to-One, concluding with a networking reception. Day two of the conference, "Success in a Competitive Environment," included such topics as MDOT's Changing Business Practices, Legislative Updates, Supplier & Trucker Updates, CPR Training, Cost Controls for Construction and Service firms. The conferences were vehicles by which MDOT is improving Michigan's total transportation system by efficiently delivering transportation products, services and information to those certified or seeking certification.

The Education and Training Program received 271 applications for reimbursement of training sessions attended by certified DBEs in FY 2002 and 251 applications were approved for training in areas that provided assistance to the firm to help in their goals to become self- sufficient in a competitive environment.

Sincerely,

Director

c Govt. Affairs M. Frierson P. Collins

## CAPACITY BUILDING OF CONSTRUCTION SMME'S – EXPERIENCES ON A SOUTH AFRICAN TOLL ROAD

by

#### Glenn Havemann\*

#### **ABSTRACT**

This paper deals with Construction SMME capacity building in the environment of a toll road project between South Africa and Mozambique. The paper explores the use of social contracting as the vehicle to integrate entrepreneurial development into mainstream construction activities and relates the experiences gained in the case study of the South African portion of the toll road.

Keywords: SMME's, construction, social contract

#### 1. INTRODUCTION

This paper deals with Construction SMME capacity building in the environment of a toll road project between South Africa and Mozambique. The paper explores the use of social contracting as the vehicle to integrate entrepreneurial development into mainstream construction activities and relates the experiences gained in the case study of the South African portion of the toll road.

In this paper capacity building refers to the process of empowering SMME's with construction and business skills training as well as empowering them with access to financial resources. SMME's are regarded as fully-fledged entrepreneurs when they no longer exhibit any form of dependency on the established construction and business sector. Ideally the relationship should change from one of dependency to that of interdependency.

Construction SMMEs (small, medium or micro enterprises) is a DBSA development term that refers to local emerging entrepreneurs or small contractors, women in construction, disabled persons and the youth from the previously disadvantaged black communities in South Africa. Participating SMME's identified during the consultative procurement and tendering process are known as targeted SMME's.

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Specialist in Construction SMME Development, Specialist Business Unit Development Bank of Southern Africa. +27 11 3133321 cell +27 82 416 2408 email <a href="mailto:glennh@dbsa.org">glennh@dbsa.org</a>, fax +27 11 3133086

#### 1.1 The Case Study

The case study is of a 30-year concession contract for the upgrading, maintenance and construction of new sections of the 504 kilometres of National N4 toll road passing through the South African province of Mpumalanga and ending at the Mozambique seaport of Maputo.

The case study focuses on the South African portion, approximately 434 kilometers, of the N4 Toll Road from Witbank to the Komatipoort border with Mozambique. As yet no independent evaluation reports have been commissioned for the Mozambique portion.

The evaluation report on the South African portion of the road by the Development Bank of Southern Africa (DBSA) and Ntsika Enterprise Promotion Agency titled "Investment – Led Entrepreneurship Development: An Investigation into the Impact of Large Investments on the SMME sector. The experience of the N4 Maputo Toll Road" Rogerson, C M, (1999) has provided the background to the case study referred to in this paper as the N4 Toll Road. The closing report by the N4 concessionaires (TRAC November 2000) detailing the outcomes of the Social Contract has supplemented the evaluation report of 1999.

#### 1.2 An Overview of the Successes and Shortcomings in the Case Study.

Although entrepreneurial development, or small medium and micro enterprise development (SMME) spans all sectors in the South African economy, this paper focuses on entrepreneurial capacity building in the context of the construction sector, hence the term Construction SMME's.

In terms of achieving targeted outcomes, the above report indicates a high degree of success in implementing the Social Contract. However, the reports also express the somewhat more subjective view that more job opportunities, training and financial support could have been offered by the concessionaire. This will no doubt remain speculative until such time as a clearer understanding of the ability of the emerging sector to respond to the opportunities to participate in large infrastructure projects is known. This is generally referred to, as the absorption capacity of SMME's, and is largely dependent on the public and private sectors' ability to provide an enabling environment for SMMEs to access construction contracts, training and financial assistance.

Although the concessionaire's attempts at facilitating access to finance proved fruitless, due mainly to the reluctance of commercial banks to lend to those with limited business skills and track records, the number of SMMEs engaged in construction contracts on the N4 (see Table 2) compares favourably with other projects. There is, however, no indication that any growth in financial independence of the SMME's involved occurred. Judging by the responses of the SMME's interviewed on the N4 they were left to their own ingenuity to access bridging finance to start up their contracts. The noticeable lack of a suitable financial mechanism resulted in many SMME's neither participating nor realizing their full potential (Rogerson C 2000).

Notwithstanding these shortcomings, the use of the Social Contract to mobilize private sector resources to engage and build Construction SMME's capacity has proved worthwhile. A further measure of success is the extent to which the N4 Social Contract now serves as a benchmark for other national toll road projects (See N3 Durban and N4 Platinum Toll Roads).

This paper is divided into three sections that address the contracting environment; the vehicle used to deliver capacity building and the realities on the ground.

**Section A.** Deals with the policy and regulatory contracting environment in South Africa, the private and public sectors attempts to comply with SMME engagement and an analysis of national benchmarks on job creation in the construction sector.

**Section B**. Deals with the social contract as a vehicle to deliver SMME capacity building in the construction sector and the enabling training approaches and funding strategies.

**Section C** Deals with the realities of SMME capacity building on the South African portion of the N4 Toll Road.

#### 2. THE CONTRACTING ENVIRONMENT IN SOUTH AFRICA

2.1 The South African Legislative and Regulatory Framework for SMME Development The introduction of Social Contracting into the environment of the Construction Sector should be seen in the context of South Africa's desire to bring about economic reform and transformation through social upliftment and investment in infrastructure. South Africa's current legislation provides a framework for the preferential employment of emerging black entrepreneurs (The Preferential Procurement Policy Framework Act No 5 of 2000). The education and training environment also actively promotes the development of entrepreneurial skills (The Sector Education and Training Authority Act No 9 (1) of the Skills Development Act no 97 of 1998), as do the government structures responsible for the "roll out" of construction sector policy such as the Department of Public Works and the South African National Road Agency (SANRA) which have played a leading role in consultations with the established Construction industry, the Emerging Construction sector and government. This has resulted in a new construction sector white paper aptly titled "Creating an Enabling Environment for Reconstruction, Growth and Development in the Construction Industry".

#### 2.2 New Approaches to Contracting

As a result of the above initiatives, conventional construction firms in South Africa have undergone rapid change and have transformed into a collective mix of established and emerging contractors. Innovative and in some cases dubious examples of equity shareholding, joint ventures, and informal social compacts have created a contracting environment where the interests of the emerging contractors require constant monitoring to ensure that exploitation does not occur. Although not the norm, cases of fronting, where established contractors attempted to gain access to contracts by buying in so-called emerging SMMEs with little or no contracting experience were evident on the N4 toll road. Notwithstanding the above, the transition has been smooth and in most cases appears to be gathering momentum across a broad spectrum of private and public sector funded projects (See Table 1).

#### 2.3 The Outcome of SMME Capacity Building interventions on Projects in SA

Policy interventions (legislation mentioned above) and the use of an investment led entrepreneurial development strategy has without a doubt led to large scale Construction SMME capacity building in projects not only in the public and private sector but also in the large private public partnership projects (PPP's) such as the N4 toll road (Havemann, van Gass 2001). Table 1 below provides a clear indication of the impact of social contracting on a variety of infrastructure projects across South Africa.

Table 1: Case studies of compliance with SMME policy and employment outcomes in public, private, private public partnership (PPP) and development funded projects

Case study	Areas of compliance	Outcomes as a percentage of
·	•	cost- typical set asides
Sun International	New Casino license to construct, manage	70% of the cost of the
Carnival City	and operate a casino. Implemented	construction work awarded to
Brakpan	SMME "set a sides" in the construction	SMMEs (Reznik 2000)-
	process, equity ownership and Service	(Rogerson 1999)
	Level Agreements	
Concessionaire	Concessionaire contract for the design,	14.6% of the cost of the SA
contract with the	finance, operation and maintenance of a	section of the toll road
Trans Africa	national toll road. Implemented a	construction works awarded to
Concessionaire	comprehensive socio economic	SMMEs.
(TRAC)	development strategy around job creation,	(Rogerson June 1999)
N4 Maputo Toll	SMME and community development	Note: The subsequent TRAC
Road		Report November 2000
		indicates that the initial 14.6 %
		was increased and the target of
		20% achieved)
Development Bank	Pre-requisite to disbursement in DBSA	Varies per sector from 0.25 to
of Southern Africa-	funded projects. Implementation of the	46% of the project cost and
development funded	development impact approach, job	upward (Havemann, van Gass
projects.	creation and involvement of SMMEs	2001)

#### 2.4 SA National Benchmarks for Employment Creation in the Construction Sector

Although entrepreneurial development is not separately recorded by the SA Statistical Services, the number of jobs created in the Construction sector is used as an indicator. The national benchmark for the SA Construction sector for 1999/2000 is 14.69 person years per R1 million invested in infrastructure. This is made up of 13.93 for Civil Engineering and 15.46 for Building. Dividing value added or expenditure into employment derives person years per R1 million invested in infrastructure.

(Refer. "Employment Creation and Construction SMME involvement in Development Projects in South Africa- A Sector and Sub sector Analyses" Havemann, van Gass 2001.)

#### 2.5 Entrepreneurial Job Creation on the N4 Toll Road

By comparison, the entrepreneurial jobs on the N4 toll road, based on the value of the SMME contracts (R226mil) over the 3-year construction period, were more than double the national norm at 32 person years per R1 million. These figures are expected to further increase over the remaining 27 years during which the SMME maintenance contracts will go out to tender.

#### 3. SOCIAL CONTRACTING AS A VEHICLE FOR CAPACITY BUILDING

From the lessons learnt on other DBSA funded projects, alternative approaches on how to create an enabling environment for SMME involvement, such as packaging projects, identifying, targeting and catering for SMME needs. They are discussed below and were adopted in the Social Contract on the N4 Toll Road.

#### 3.1 Social Contracting

Social Contracting in this paper refers to a formalized contract in which the concessionaire is obliged to assist in the social and entrepreneurial upliftment of communities in the immediate vicinity of the project. In the context of construction SMME development the term empowerment is often used as an alternative to capacity building. Construction SMMEs are considered empowered when they reach a stage when their levels of dependency on the provision of training and mechanisms to access working capital fall away. In other words they are enabled to self sustain their SMME activities. (Refer. "Investment led Entrepreneurship Development: An investigation into the impact of large investments on the SMME sector"-Rogerson 1999).

#### 3.2 Key Objectives and Funding Strategies

The key objective in social contracting is to create an enabling environment that leads to increased SMME participation and skills development. This requires mobilizing available construction sector resources such as the established contractor or concessionaire to provide training and transfer skills on site. Accrediting the construction site for training purposes is an approach that ensures that SMME training is directly related to the job opportunity, meets the requirements of the Sector Education and Training Authorities (SETA) and enables the auditing of allocated funds.

The arrangements for providing financial mechanisms (such as collateral guarantees) to enable SMMEs to access working capital from commercial banks, remains both complex and difficult to resolve. (See N4 Case study). The DBSA is however making progress with a commercial banking institution towards piloting a conceptual model to serve as a model for financial guarantees.

#### 3.3 Targeting Construction SMME's

Targeting has the decided benefit of enabling both beneficiary and provider to identify demand driven training and to allocate resources during the implementation phase of the project. Because of the uncertainty surrounding SMME needs, budgeting for the Social Contract in the bidding stages of most projects remains speculative and therefore difficult to motivate. Most projects inevitably underestimate the training needs of SMMEs. This leads to budget driven as opposed to

demand driven training programmes that limit entrepreneurial training. On the other hand entrepreneurs see an opportunity to access free training, which places an added pressure on the project budget. In general, because of the huge demand for training in South Africa it is debatable as to what could be considered an adequate budget or for that matter to what extent projects should be burdened with excess training needs. In the case of the N4 toll road approximately R8 million (0.53%) of the R1.5 billion concession contract was spent on implementing the Social Contract whereas R22 million (0.63%)of the R3.5 billion N3 toll road concession contract was budgeted for implementing the Social Contract.

#### 3.4 Designing for Construction SMME Participation

To accommodate SMMEs, projects are designed and packaged to present a wide range of economically feasible job opportunities, many of which are subsequently revised after consultation with SMMEs. (See N4 Case study). These packages represent small construction or maintenance contracts. In some cases these contracts are either part of a larger negotiated set aside package of SMME work (such a the N4 toll road) or collectively make up the total construction contract. Both approaches require the resources of an established contractor in the form of a joint venture with the SMMEs. The social contract acts as the adhesive force between the contracting parties provided that the SMME/established contractor business relationship is based on fostering interdependency rather than sustaining the current high levels of SMME dependency.

#### 4. THE N4 TOLL ROAD – A CASE STUDY

#### **4.1.** The N4 Concession Contract

In May 1997, a 30-year concession contract for the upgrading, maintenance and construction of new sections of the 504 kilometres of national N4 toll road passing through the South African province of Mpumalanga and ending at the Mozambique seaport of Maputo was awarded to a South African and French construction consortium (Trans African Concessions- TRAC). The concessionaire was required to design, build, operate and maintain the toll road and toll plazas on a thirty-year Build Operate Transfer (BOT) at an estimated cost of R 1.5 billion.

#### **4.2** The N4 Social Contract

The concessionaire was also required to implement an integrated community participation programme of which the building of construction SMME entrepreneurial capacity was a key focus area. Of the SA portion, 20% of the Initial Construction Work was negotiated and packaged for SMMEs and 30% of the operation and maintenance work while the smaller Mozambique portion was 40% and 50% respectively. This paper only deals with the SMME capacity building experiences on the SA portion.

The N4 Social Contract was structured on three pillars namely, Community Participation, Education and Training and Development of Small and Medium Micro Enterprise (SMME). These pillars collectively underpinned the arrangements for engaging and building the entrepreneurial capacity of Construction SMMEs.

Clear entrepreneurial development objectives with estimated budgets for consultation; pre tender and contract training, and targeted outcomes formed the framework for implementing the Social Contract. The concessionaire made extensive use of DBSA expertise and experience gained in Construction SMME development to formulate a consultative SMME awareness, engagement and participation strategy.

There were no contractual penalties in place for non-compliance with the terms and conditions of the Social Contract. Instead the collective voice of the communities, provincial government and the DBSA was instrumental in ensuring that the concessionaire's complied with its social undertakings. This was rectified in later PPP concession contracts such as the national N3 Durban Toll road where substantial penalty clauses could be invoked in the event of non-compliance

#### 4.3 The Partnership and Stakeholders

The N4 project is a partnership between private and public sector commonly referred to as a private public partnership (PPP). Of the total estimated costs of R1.5 billion (approximately \$200 million), the DBSA financed R200 million (approximately \$26.7million). The DBSA played a facilitating role between the lenders and the concessionaires Basil Read, Stocks and Stocks and Bouygues to ensure that the developmental aspect of the project received the necessary attention. Facilitation included implementation of the requirements set by both the SA and Mozambique governments for the effective participation of SMMEs. The stakeholders, especially the SMMEs, continuously expressed the need for an intermediary to ensure compliance with national policy, a role that DBSA fulfilled in the implementation stage of the project.

#### 4.4 Construction SMME Training on the N4

As part of its commitment to the Social Contract, the N4 concessionaire built three Community centres along the length of the road that were extensively used for skills training (See Table 2). These centres, together with mobile community forums, provided local entrepreneurs with the opportunity to become aware of the job opportunities and engage the concessionaire which also made use of the opportunity to identify SMMEs and target those suited for pre- tender training.

Although the concessionaire trained 11503 entrepreneurs in construction skills over a three-year period, this was budget driven, as the concessionaire was unable (at the bidding stage) to determine how many people would require training. A "free for all' training perception was ever present but was controlled by limiting training to the target group who tendered. The training was subsequently extended to those who were awarded tenders. The number of SMMEs trained does not however imply that the total trained complement of entrepreneurs was engaged in the project (See Table 2).

Training covered a broad variety of needs that ranged from the skills required to work in the construction environment to survival skills. For example an additional 8419 people were trained in construction, social and community skills such as safety, induction and environmental awareness, construction skills, first aid /basic health care and nursing, management, road safety, basic tendering, Adult Basic Education and Training, business skills, you and your money, how to apply for a job, security, cooking, computer skills and sewing.

#### 4.5 Job Opportunities and Construction SMME Contracts on the N4

In total 7206 job opportunities were created over the first 3 years of the project at a cost of R226 million (Approximately \$30.1 million). At 32 person years per R1 million invested in infrastructure, this compares favourably with the national benchmark of 13.93 person years per R1 million (see Table 2).

To accommodate SMME's, 680 construction and maintenance contracts were designed and packaged to present a wide range of economically feasible job opportunities consolidated into small contracts. The economic feasibility of the packages of work was often in dispute as many of the contracts proved either too small or too large and were subsequently revised to match the available SMME resources and skills.

Despite the fact that this was a national toll road, communities in the Mpumalanga province were adamant that the N4 toll road came through their province and jobs were therefore automatically reserved for them. This was resolved by offering Mpumalanga communities in the vicinity of the project first option, expanding to the municipal districts in the province and finally to SMMEs from other provinces.

#### 4.6 Involvement of the South African Women in Construction

A notable exception was the involvement of the South African Women in Construction (SAWIC), a national body of emerging women contractors whose members through some skillful negotiation were able to participate at will irrespective of where in South Africa they were registered! No doubt the political desire to be seen to be supporting the issues of gender equity were contributing factors.

The number of women involved in construction activities on the N4 toll road over the three year period of construction was however disappointing with 2 in management, 20 in semi skilled and skilled and 113 in unskilled construction activities. In total, this represented 6% of the total SMME involvement, the balance of 94% being taken up by men. The reasons for the low involvement appears to be the rural environment though which the N4 passes where the perception that the construction sector is an unattractive, harsh working environment in which prejudices against women abounds. (Verwey and Havemann 2001)

#### 4.7 Preferential Procurement Measures on the N4

The concessionaire after consultation and negotiation with the stakeholders developed an 8-point preferential procurement guideline in line with the National Preferential Procurement Policy Framework. Points were given not only on the basis of tendered cost but for using local, black entrepreneurs, percentage equity shareholding in the company, previous experience in construction, construction and management skills, use of women contractors, use of labourers from the community and previous projects completed. SMME's requiring assistance in training to tender were not discriminated against, nor were those without access to adequate equipment, plant and machinery, so long as they had the necessary skills to operate and manage the use thereof.

In some cases SMMEs tendered without the conventional establishment costs, plant and machinery, (these were provided by the concessionaire). In other cases, where they had access to plant and equipment, their tenders included establishment costs. The success of the SMME engagement programme could in part be attributed to the concessionaire's flexibility in procuring their services.

#### 4.8 Tenders Awarded to Construction SMME's

R226 million (approximately \$30.1million) of construction work was awarded to 160 SMME's in the form of labour contracts, small construction contracts and ancillary contracts such as grass cutting, fencing, catering, signage, haulage, security etc. Judging by the number of contracts awarded (680), many of the SMMEs were awarded contracts on a repetitive basis, thus freeing the concessionaire from engaging and training new SMMEs. The concessionaire held the view that this was providing "sustainable employment" to individual SMME's for the three-year duration of the project. Although linked to employment, the converse view argues that sustainable development is a process that promotes the entrepreneurial development of SMMEs (new and existing) through ongoing skills development. It is therefore not only the number of employment opportunities created but also the number of people trained in the opportunity.

#### 4.9 Lack of Financial Mechanisms to Enable Construction SMME Participation

Expectations that development institutions specializing in guarantee funds and capacity building and their private sector equivalent, the commercial banks, would provide the desperately needed SMME bridging finance failed to materialize. Because of the concessionaire's lack of success in facilitating financial SMME support from commercial banks in SA (these institutions were reluctant to provide what was perceived as high risk entrepreneurial loans to SMMEs), many SMME's fell by the way, much to the concern of the SMMEs and the DBSA. In most cases SMME's borrowed finance from sources outside the formal financial structures and ended up paying exorbitant interest rates. This also was rectified in later projects such as the N3 toll road where concessionaires were required to provide rather than facilitate SMME funding mechanisms.

#### **4.10** Summary of the Outcome of the Social Contract

Table 2: Construction SMME involvement and Capacity Building- N4 Toll road

Table 2. Constitution Switch involvement and Capacity Bunding-10	T I OH I Oud
Over a 3 year Construction Period	
Consultative community forums	10
Meetings held with communities	Over 200
Employment opportunities taken up	7206
People trained in construction skills	11503
People trained in social and development community skills	8419
Costs associate with all types of training (excluding 3 training centres, furniture and	R6.06 million
equipment of R1.76 million and dedicated SMME training courses of R0.21 million)	
Construction SMME tenders awarded	680
Construction SMME's awarded tenders	160
Value of Construction SMME work	R226 million
Value of Construction SMME work as a % of Initial Construction Work (3 year period)	20%
Value of Construction SMME work as a % of Operation and Maintenance Work (27	30% Anticipated
year period)	

#### 5. CONCLUSION

In terms of financial empowerment and independence, the financial mechanism to assist Construction SMMEs is a key issue on all projects and was not adequately addressed on the N4. Accountability was neither acknowledged nor contractually binding and the arrangements for sourcing funds for this purpose were based on optimistic expectations.

In Social Contracts of this nature, there is much debate as to where accountability for financial support mechanisms for SMME participation should rest. Three views are currently found. Firstly that in private sector driven projects (such as the N4) the training and financial empowerment of Construction SMMEs should be contained and funded in the project, secondly that projects should source external public or private sector funds for capacity building and thirdly that projects should contain a mixture of both internal and external funding for capacity building. In the author's view as long as the provider is held accountable and arrangements are contractually binding it is possible that all three approaches could work.

While there are differing opinions on the outcomes of the Social Contract, detractors tend to depart from a speculative "could have been better" citing the concessionaires' lack of knowledge of the SMME environment and the lack of any form of contractual penalty and unsupportive financial mechanisms as factors. The high profile nature of the N4, its magnitude and the rural community expectations that it would become an immediate and desperately needed source of employment and training, was a continuing source of concern to the concessionaire. (See number of community meetings- Table 2) The N4 Social Contract was intended to address the needs of the project and not alleviate the burden of unemployment in the Mpumalanga Province. Undoubtedly the N4 project had the potential to generate more than the 20% SMME involvement that it achieved but results can only be judged against intended outcomes, all of which, including SMME training were achieved in the allocated time and budget. Notwithstanding the omission of a suitable financial mechanism, the N4 case study clearly illustrates the effectiveness of the Social Contract as a vehicle to enable Construction SMME capacity building.

#### 6. RECOMMENDATIONS

As illustrated in the N4 case study, most obstacles to SMME capacity building in construction projects such as access to job opportunities and skills training can be overcome, however one key question of SMME capacity building still remains unresolved, that is

"What financial mechanisms are needed to enable Construction SMMEs to access affordable bridging finance and credit lines in an environment where financial institutions do not have the capacity nor the appetite for SMME business?"

This paper strongly recommends that the financial empowerment of SMME's in construction projects receive the attention it deserves.

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